Remarks

Response to Claim Rejections Under 35 U.S.C. 103(a)

The Office has rejected claims 1-25 under 35 U.S.C. § 103(a) as being unpatentable over

U.S. Patent 6,594,673 issued to Smith et al. in view of U.S. Patent 6,618,727 issued to Wheeler

et al. The Office bears the initial burden of establishing a *prima facie* case of obviousness. *See In*

re Piasecki, 223 USPQ785, 788 (Fed. Cir. 1984). The Office has failed to establish a *prima facie*

case for obviousness, since the Office has not shown that every limitation in the claims of the

current application are not found in the cited references. The Office has also not cited some

suggestion or motivation, either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art, to modify the references or to combine reference

teachings. In addition, the Office has not cited an expectation of success in combining the Smith

and Wheeler references. Any reasonable expectation of success must be found in the prior art,

and not based on applicant's disclosure, which includes the Wheeler reference.

With regard to independent claim 1-25, the Office has rejected claims 1-25 under 35

U.S.C. § 103(a) as being unpatentable over Smith et al. (U.S. Patent 6,594,673) in view of

Wheeler et al. (U.S. Patent 6,618,727). Claims 1-25 are not anticipated by Smith and Wheeler.

First, Smith discloses the use of a database filter to obtain and measure a user-selected portion of

the collaborative information. The Wheeler invention is not a database filter but a similarity

search engine for determining a degree of similarity between hierarchical database objects. The

Wheeler invention is distinguishable from a database filter, and therefore, it would not have been

obvious for a person having ordinary skill in the art to substitute the similarity search function of

Wheeler for the database filter disclosed in the Smith reference (Smith does not disclose a

generic search function). Since the Wheeler disclosure is incorporated by reference into the

present application, as filed, it appears that hindsight may be a factor in the conclusion drawn by the Office that it was obvious to combine the Wheeler and Smith references. The Office has not satisfied the requirement for citing some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings. As noted above, the teaching or suggestion to make the claimed combination must be found in the prior art, and not based on applicant's disclosure, which includes the Wheeler reference. Second, the Office has not provided a citation to demonstrate a reasonable expectation of success by combining Wheeler and Smith. In fact, without substantial construction and reconstruction, the combination of Wheeler and Smith would be inoperable and unsuccessful. As noted above, the reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure. And lastly, the cited references of Wheeler and Smith fail to teach or suggest all the claim limitations of the Applicants' claimed invention. The Applicants believe that claims 1-25 are not unpatentable over the cited references of Wheeler and Smith, and are nonobvious under 35 U.S.C. § 103(a).

Considering independent claim 1 (previously presented), the Office is incorrect in the assertion that the abstract of the Smith reference discloses a computer implemented visualization model of similarity relationships between documents. There is no disclosure in Smith of visualization of similarity relationships between documents, or of a generic search function. Regarding the first element of independent claim 1, the first element includes the limitation "performing a similarity search in a database based on at least one reference attribute of at least one reference document to find at least one target document with at least one target attribute having a similarity relationship to the at least one reference attribute". The Office is incorrect in interpreting the Smith reference as performing a search. The Office citation in Smith (col. 8,

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lines 54-57) describes a database filter, which may function as a generally conventional relational database filter. Database filters are distinguishable from similarity search engines, as disclosed in the Wheeler reference, which is incorporated by reference into the present disclosure. The first element of independent claim 1 broadly describes the similarity search functions disclosed in the Wheeler reference incorporated into Applicants' disclosure. The assertion by the Office that a "database query" is the same as a "similarity search" is incorrect. A database query can be either a *select query* for data retrieval or an *action query* for performing additional operations on the data, such as insertion, updating, or deletion. A similarity search according to the Wheeler reference requires a search engine that searches a database to identify degrees of similarity between document attributes that are combined to form a degree of similarity between documents. For example, any number between 0 and 1 may represent a degree of similarity, where 0 represents no similarity and 1 represents exact similarity.

Regarding the second element of claim 1 (previously presented), the second element of includes the limitation "creating unique visualization model nodes corresponding to the at least one reference document and the at least one target document". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating unique visualization model nodes corresponding to the at least one reference document and the at least one target document. There

is no correspondence to or disclosure of Applicants' second element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Regarding the currently appended third element of claim 1 (previously presented), the third element of claim 1 includes the limitation "assigning properties to the unique visualization model nodes including form item, link count, group ID, hidden count, locked, caption, color, hierarchical level, selected and ID". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 8, lines 9-10) merely states, "The message ID is a unique identifier for the post." There is no disclosure in the Smith or Wheeler reference of the claimed assigned properties to the unique visualization model nodes. There is no correspondence to or disclosure of Applicants' third element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 1 (previously presented), the fourth element of claim 1 includes the limitation "creating unique visualization model edges corresponding to the similarity relationships between the at least one reference document and the at least one target document". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the

strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating unique visualization model edges corresponding to the at least one reference document and the at least one target document. There is no correspondence to or disclosure of Applicants' fourth element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 1 (previously presented), the fifth element of claim 1 includes the limitation "assigning properties to the unique visualization model edges including from node, from node ID, to node, to node ID, query list, caption, color, visible, selected and ID". The Office citation in Smith (col. 8, lines 9-10) merely states, "The message ID is a unique identifier for the post." There is no disclosure in the Smith or Wheeler reference of the claimed assigned properties to the unique visualization model edges. There is no correspondence to or disclosure of Applicants' fifth element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Regarding the sixth element of claim 1 (previously presented), the sixth element of claim 1 includes the limitation "displaying the unique visualization model nodes and the unique visualization model edges on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines

64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of displaying the unique visualization model nodes and the unique visualization model edges on a graphical user interface. There is no correspondence to or disclosure of Applicants' sixth element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Regarding the currently appended seventh element of claim 1 (previously presented), the seventh element of claim 1 includes the limitation "indicating a degree of similarity between the displayed unique visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describes links nodes, such as links between core threads and other threads, may be indicated by the relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of indicating a degree of similarity between visualization model nodes by the visualization model edges. There is no correspondence to or disclosure of Applicants' seventh element of claim 1 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 1 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 2 (previously presented), Applicants believe that claim 2 is not unpatentable over the cited references. Since claim 2 is dependent on claim 1, which has been shown above to be nonobvious, claim 2 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 2 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 3 (previously presented), Applicants believe that claim 3 is not unpatentable over the cited references. Since claim 3 is dependent on claim 1, which has been shown above to be nonobvious, claim 3 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 3 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 3 includes the limitations "wherein the similarity search returns a result set of the at least one reference document, the at least one target document, and similarity relationships between the at least one reference document and the at least one target document that are used by the visualization model to create the unique visualization model nodes corresponding to the documents and the unique visualization model edges corresponding to the similarity relationships between the documents". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith or Wheeler reference of using the contents of the result set to create the unique visualization model nodes corresponding to the documents and the unique visualization model edges corresponding to the similarity relationships between the documents. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35

U.S.C. § 103(a). Therefore, the rejection of claim 3 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 17 (original), Applicants believe that claim 17 is not unpatentable over the cited references. Since claim 17 is dependent on claim 1, which has been shown above to be nonobvious, claim 17 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 17 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 17 includes the limitations "wherein the visual representation is three dimensional." The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (Fig. 13) shows a two-dimensional figure. There is no disclosure in Smith that Fig. 13 is three-dimensional. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 17 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 22 (previously presented), Applicants believe that claim 22 is not unpatentable over the cited references. Since claim 22 is dependent on claim 1, which has been shown above to be nonobvious, claim 22 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 22 is unsupported by the cited references, and should be withdrawn.

Considering independent claim 4 (previously presented), the Office is incorrect in the assertion that the abstract of the Smith reference discloses a computer-implemented interactive visualization model of similarity relationships between documents. There is no disclosure in Smith of visualization of similarity relationships between documents, or of a generic search function.

Regarding the first element of independent claim 4 (previously presented), the first element includes the limitation "using a similarity search performed on reference attributes of a reference document which results in a set of 0 to n target documents with target attributes having similarity relationships with the reference attribute". The Office is incorrect in interpreting the Smith reference as performing a search. The Office citation in Smith (Abstract) describes a database filter, which may function as a generally conventional relational database filter. Database filters are distinguishable from similarity search engines, as disclosed in the Wheeler reference, which is incorporated by reference into the present disclosure. A database filter is a program or section of code that is designed to examine each input or output request for certain qualifying criteria and then process or forward it accordingly. It is "pass-through" code that takes input data, makes some specific decision about it and possible transformation of it, and passes it on to another program in a kind of pipeline, without performing any input/output operation on its own. The first element of independent claim 4 broadly describes the similarity search functions disclosed in the Wheeler reference incorporated into Applicants' disclosure. A similarity search according to the Wheeler reference requires a search engine that searches a database to identify degrees of similarity between document attributes that are combined to form a degree of similarity between documents. For example, any number between 0 and 1 may represent a degree of similarity, where 0 represents no similarity and 1 represents exact similarity.

Regarding the second element of independent claim 4 (previously presented), the second element of includes the limitation "creating visualization model nodes corresponding to the reference document and each target document". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results

obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating visualization model nodes corresponding to the reference document and each target document. There is no correspondence to or disclosure of Applicants' second element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4 is unsupported by the cited references, and should be withdrawn.

Regarding the third element of independent claim 4 (previously presented), the third element of claim 4 includes the limitation "performing a lookup on a unique nodes list for determining if the created visualization model nodes already exists, adding the created visualization model nodes to the unique nodes list if the created visualization model nodes are not on the unique nodes list, and designating the visualization model nodes on the unique nodes list as unique visualization model nodes". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 8, lines 8-18) describes a database filter for extracting selected information, and cross-postings between newsgroups. There is no disclosure in the Smith or Wheeler reference of the claimed lookup on a unique nodes list to determine if a visualization model node is unique. There is no correspondence to or disclosure of Applicants' third element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants'

claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4 is unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 4 (previously presented), the fourth element of claim 4 includes the limitation "creating visualization model edges corresponding to the similarity relationships between the reference document and each target document". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating visualization model edges corresponding to the similarity relationships between the reference document and each target document. There is no correspondence to or disclosure of Applicants' fourth element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4 is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 4 (previously presented), the fifth element of claim 4 includes the limitation "performing a lookup on a unique edges list for determining if the created visualization model edges already exists, adding the created visualization model edges to the unique edges list if the created visualization model edges are not on the unique edges list, and designating the visualization model edges on the unique edges list as unique visualization model

edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 8, lines 8-18) describes a database filter for extracting selected information, and cross-postings between newsgroups. There is no disclosure in the Smith or Wheeler reference of the claimed lookup on a unique edges list to determine if a visualization model edge is unique. There is no correspondence to or disclosure of Applicants' fifth element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4 is unsupported by the cited references, and should be withdrawn.

Regarding the sixth element of claim 4 (previously presented), the sixth element of claim 4 includes the limitation "displaying the unique visualization model nodes corresponding to the reference documents and each target document and the unique visualization model edges corresponding to the similarity relationships on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of displaying the unique visualization model nodes and the unique visualization model edges on a graphical user interface. There is no correspondence to or disclosure of Applicants' sixth element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations

of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4 is unsupported by the cited references, and should be withdrawn.

Regarding the seventh element of claim 4 (previously presented), the seventh element of claim 4 includes the limitation "indicating a degree of similarity between the displayed unique visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describes links between nodes, such as links between core threads and other threads, may be indicated by the relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of indicating a degree of similarity between visualization model nodes by the visualization model edges. There is no correspondence to or disclosure of Applicants' seventh element of claim 4 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 4, as amended, is unsupported by the cited references, and should be withdrawn.

Considering dependent claims 5-7 (original), 20 (previously presented) and 23 (previously presented), Applicants believe that claims 5-7, 20 and 23 are not unpatentable over the cited references. Since claims 5-7, 20 and 23 are dependent on claim 4, which has been shown above to be nonobvious, claims 5-7, 20 and 23 are also nonobvious under 35 U.S.C. § 103(a). Therefore the rejections of claims 5-7, 20 and 23 are unsupported by the cited references, and should be withdrawn.

Considering independent claim 8 (previously presented), the Office is incorrect in the assertion that the Smith reference discloses a computer-implemented visualization model of

similarities between documents. There is no disclosure in Smith of a visualization model of similarities between documents, or of a generic search function.

Regarding the first element of independent claim 8 (previously presented), the first element includes the limitation "displaying a reference hierarchical object". The Office is incorrect in interpreting the Smith reference as displaying a reference hierarchical object. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no correspondence to or disclosure of Applicants' first element of claim 8 found in the Smith reference. The first element of independent claim 8 is broadly disclosed in the Wheeler reference incorporated into Applicants' disclosure

Regarding the second element of claim 8 (previously presented), the second element of includes the limitation "allowing a user to initiate a similarity search, based on at least one attribute of the reference hierarchical object, to find at least one target hierarchical object". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 8, lines 54-57) describes a database filter, which may function as a generally conventional relational database filter. Database filters are distinguishable from similarity search engines, as disclosed in the Wheeler reference, which is incorporated by reference into the present disclosure. A database filter is a program or section of code that is designed to examine each input or output request for certain qualifying criteria and then process

or forward it accordingly. It is "pass-through" code that takes input data, makes some specific

decision about it and possible transformation of it, and passes it on to another program in a kind

of pipeline, without performing any input/output operation on its own. The first element of

independent claim 4 broadly describes the similarity search functions disclosed in the Wheeler

reference incorporated into Applicants' disclosure. A similarity search according to the Wheeler

reference requires a search engine that searches a database to identify degrees of similarity

between document attributes that are combined to form a degree of similarity between

documents. For example, any number between 0 and 1 may represent a degree of similarity,

where 0 represents no similarity and 1 represents exact similarity. There is no correspondence to

or disclosure of Applicants' second element of claim 8 found in the Smith reference. The second

element of independent claim 8 is broadly disclosed in the Wheeler reference incorporated into

Applicants' disclosure.

Regarding the third element of claim 8 (previously presented), the third element of claim

8 includes the limitation "visually representing a unique visualization model reference node

corresponding to the reference hierarchical object and a unique visualization model target node

corresponding to the at least one target hierarchical object that meet a similarity search criteria".

The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first

Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network

graphical visualization according to results obtained by a database filter and user selections. The

second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes

in the visualization indicted by relative lengths of the links. The links may be based on a spring-

based model representing forces between nodes, or the number of posters who post messages to

the linked nodes. There is no disclosure in the Smith reference of visually representing a unique

visualization model reference node corresponding to the reference hierarchical object and a unique visualization model target node corresponding to the at least one target hierarchical object that meet a similarity search criteria. There is no correspondence to or disclosure of Applicants' third element of claim 8 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 8 is unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 8 (previously presented), the fourth element of claim 8 includes the limitation "visually representing a unique visualization model edge corresponding to a similarity relationship between the reference hierarchical object and each target hierarchical object". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of visually representing a unique visualization model edge corresponding to a similarity relationship between the reference hierarchical object and each target hierarchical object. There is no correspondence to or disclosure of Applicants' fourth element of claim 8 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. §

103(a). Therefore, the rejection of claim 8 is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 8 (previously presented), the fifth element of claim 8 includes the limitation "displaying the visual representations of the unique visualization model nodes and the unique visualization model edge on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of displaying the visual representation of the unique visualization model nodes and the unique visualization model edges on a graphical user interface. There is no correspondence to or disclosure of Applicants' fifth element of claim 8 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 8 is unsupported by the cited references, and should be withdrawn.

Regarding the sixth element of claim 8 (previously presented), the sixth element of claim 8 includes the limitation "indicating a degree of similarity between the displayed unique visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describes links between nodes, such as links between core threads and

other threads, may be indicated by the relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of indicating a degree of similarity between visualization model nodes by the visualization model edges. There is no correspondence to or disclosure of Applicants' sixth element of claim 8 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 8 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 9 (previously presented), claim 9 is not unpatentable over the cited references. Since claim 9 is dependent on claim 8, which has been shown above to be nonobvious, claim 9 (currently amended) is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 9 is unsupported by the cited references, and should be withdrawn.

Regarding the first element of claim 9 (previously presented), the first element includes the limitations wherein the unique visualization model node comprises "a reference to the hierarchical object the model node represents". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 4, line 47 to col. 5, line 12) describes collaborative information represented as tabular information and as network diagrams or graphs. There is no disclosure in the Smith or Wheeler reference of the unique visualization model node comprising a reference to the hierarchical object that the model node represents. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 9 is unsupported by the cited references, and should be withdrawn.

Regarding the second element of claim 9 (previously presented), the second element includes the limitations wherein the unique visualization model node comprises "a reference to at

least one attribute of the hierarchical object used in the similarity search to determine if a unique visualization model edge exists". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 4, line 47 to col. 5, line 12) describes collaborative information represented as tabular information and as network diagrams or graphs. There is no disclosure in the Smith or Wheeler reference of the unique visualization model node comprising a reference to at least one attribute of the hierarchical object used in the similarity search to determine if a unique visualization model edge exists. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 9 is unsupported by the cited references, and should be withdrawn.

Regarding the third element of claim 9 (previously presented), the third element includes the limitations wherein the unique visualization model node comprises "visual properties of the hierarchical document the unique visualization model node represents". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-52) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. Various format controls are described. There is no disclosure in the Smith or Wheeler reference of the unique visualization model node comprising visual properties of the hierarchical document the unique visualization model node represents. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 9 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 10 (previously presented), claim 10 is not unpatentable over the cited references. Since claim 10 is dependent on claims 8 and 9, which have been shown above to be nonobvious, claim 10 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 10 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 10 includes the limitations "storing the visual representation of the unique visualization reference model node, each unique visualization target model node, and each unique visualization model edge in computer memory or on disk." The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 3, lines 51-63) merely lists various memory devices. There is no disclosure in the Smith or Wheeler reference of storing the visual representation of the unique visualization reference model node, each unique visualization target model node, and each unique visualization model edge in computer memory or on disk. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 10 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 11 (previously presented), claim 11 is not unpatentable over the cited references. Since claim 11 is dependent on claim 8, which has been shown above to be nonobvious, claim 11 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 11 is unsupported by the cited references, and should be withdrawn.

Regarding the first element of claim 11 (previously presented), the first element includes the limitations wherein the unique visualization model edge comprises "an identifier of the unique visualization reference model node from which the visual representation of the unique visualization model edge will extend and an identifier of the at least one unique visualization

target model node to which the visual representation of the unique visualization model edge will extend". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 4, line 47 to col. 5, line 12) describes collaborative information represented as tabular information and as network diagrams or graphs. The second Office citation in Smith (col 9, lines 24-52) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. Various format controls are also described. There is no disclosure in the Smith or Wheeler reference of the unique visualization model edge comprises an identifier of the unique visualization reference model node from which the visual representation of the unique visualization model edge will extend and an identifier of the at least one unique visualization target model node to which the visual representation of the unique visualization model edge will extend. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 11 is unsupported by the cited references, and should be withdrawn.

Regarding the second element of claim 11 (previously presented), the second element includes the limitations wherein the unique visualization model edge comprises "a list of the similarity search attributes used in the similarity search". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 4, line 47 to col. 5, line 12) describes collaborative information represented as tabular information and as network diagrams or graphs. The second Office citation in Smith (col 9, lines 24-52) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the

number of posters who post messages to the linked nodes. Various format controls are also described. There is no disclosure in the Smith or Wheeler reference of the unique visualization model edge comprises a list of the similarity search attributes used in the similarity search. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 11 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 12 (original), claim 12 is not unpatentable over the cited references. Since claim 12 is dependent on claims 8 and 11, which have been shown above to be nonobvious, claim 12 (original) is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 12 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 24 (previously presented), claim 24 is not unpatentable over the cited references. Since claim 24 is dependent on claim 8, which has been shown above to be nonobvious, claim 24 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 24 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 15 (previously presented), claim 15 is not unpatentable over the cited references. Since claim 15 is dependent on claim 8, which has been shown above to be nonobvious, claim 15 (currently amended) is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 15 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 15 includes the limitations "wherein each unique visualization model edge indicates a degree of similarity between the reference hierarchical object and the target hierarchical object and is displayed as a line connecting unique visualization model nodes, said model nodes being depicted as geometric shapes on the graphical user interface." The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office

citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith or Wheeler reference of each unique visualization model edge indicating a degree of similarity between the reference hierarchical object and the target hierarchical object and is displayed as a line connecting unique visualization model nodes, said model nodes being depicted as geometric shapes on the graphical user interface. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 15 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 16 (previously presented), claim 16 is not unpatentable over the cited references. Since claim 16 is dependent on claims 8 and 15, which have been shown above to be nonobvious, claim 16 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 16 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 16 includes the limitations "wherein the length of the line connecting the unique visualization model nodes varies as a function of the degree of similarity between the reference document and the target document referenced by the unique visualization model nodes." The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describe strengths of links between nodes in the visualization may be indicated by relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of varying the length of the lines connecting the unique visualization

model nodes as a function of the degree of similarity between the reference document and the target document referenced by the unique visualization model nodes. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 16 is unsupported by the cited references, and should be withdrawn.

Considering independent claim 13 (previously presented), the Office is incorrect in the assertion that the abstract of the Smith reference discloses a computer-implemented method of visualizing similarity relationships between documents. There is no disclosure in Smith of a computer-implemented method of visualizing similarity relationships between documents, or of a generic search function.

Regarding the first and second elements of independent claim 13 (previously presented), the first and second elements include the limitations "using a reference hierarchical document, performing a similarity search based on user selected attributes of the reference hierarchical document and determining a result set of target documents comprising 0 to n hierarchical documents". The Office is incorrect in interpreting the Smith reference as performing a search. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith or Wheeler reference of each unique visualization model edge indicating a degree of similarity between the reference hierarchical object and the target hierarchical object and is displayed as a line connecting unique

visualization model nodes, said model nodes being depicted as geometric shapes on the graphical user interface. The first and second elements of independent claim 13 broadly describes the similarity search functions disclosed in the Wheeler reference incorporated into Applicants' disclosure.

Regarding the third element of claim 13 (previously presented), the third element of includes the limitation "converting each hierarchical document to a unique visualization model node that visually represents each hierarchical document to be displayed on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of converting each hierarchical document to a unique visualization model node that visually represents each hierarchical document to be displayed on a graphical user interface. There is no correspondence to or disclosure of Applicants' third element of claim 13 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 13 is unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 13 (previously presented), the fourth element of claim 13 includes the limitation "using the similarity search results, creating a unique visualization model edge that visually represents the similarities between the reference

hierarchical document and each hierarchical document in the result set to be displayed on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of using the similarity search results, creating a unique visualization model edge that visually represents the similarities between the reference hierarchical document and each hierarchical document in the result set to be displayed on a graphical user interface. There is no correspondence to or disclosure of Applicants' fourth element of claim 13 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 13, is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 13 (previously presented), the fifth element of claim 13 includes the limitation "indicating a degree of similarity between the displayed unique visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describe strengths of links between nodes in the visualization may be indicated by relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of varying the length of the lines connecting the unique visualization model nodes as a function of the degree of similarity between the reference document and the target document

referenced by the unique visualization model nodes. There is no correspondence to or disclosure of Applicants' fifth element of claim 13 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 13 is unsupported by the cited references, and should be withdrawn.

Considering dependent claim 14 (previously presented), claim 14 is not unpatentable over the cited references. Since claim 14 is dependent on claim 13, which has been shown above to be nonobvious, claim 14 is also nonobvious under 35 U.S.C. § 103(a). Therefore the rejection of claim 14 is unsupported by the cited references, and should be withdrawn. Furthermore, claim 14 includes the limitations "displaying the unique visualization model edge and the unique visualization model node on a graphical user interface." The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith or Wheeler reference of displaying the unique visualization model edge and the unique visualization model node on a graphical user interface. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 14 is unsupported by the cited references, and should be withdrawn.

Considering dependent claims 21 and 25 (previously presented), claims 21 and 25 are not

unpatentable over the cited references. Since claims 21 and 25 are dependent on claim 13, which has been shown above to be nonobvious, claim 21 and 25 are also nonobvious under 35 U.S.C. § 103(a). Therefore the rejections of claims 21 and 25 are unsupported by the cited references, and should be withdrawn.

Considering independent claim 18 (previously presented), the Office is incorrect in the assertion that the abstract of the Smith reference discloses a computer-readable medium containing instructions for a visualization model of similarity relationships between documents. There is no disclosure in Smith of a computer-readable medium containing instructions for a visualization model of similarity relationships between documents, or of a generic search function.

Regarding the first element of independent claim 18 (previously presented), the first element includes the limitation "performing a similarity search in a database based on at least one reference attribute of at least one reference document to find at least one target document with at least one target attribute having a similarity relationship to the at least one reference attribute". The Office is incorrect in interpreting the Smith reference as performing a search. The Office citation in Smith (Abstract) describes a database filter, which may function as a generally conventional relational database filter. Database filters are distinguishable from similarity search engines, as disclosed in the Wheeler reference, which is incorporated by reference into the present disclosure. The first element of independent claim 18 broadly describes the similarity search functions disclosed in the Wheeler reference incorporated into Applicants' disclosure.

Regarding the second element of claim 18 (previously presented), the second element of includes the limitation "creating unique visualization model nodes corresponding to the at least one reference document and the at least one target document". The Office is incorrect in

interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating unique visualization model nodes corresponding to the at least one reference document and the at least one target document. There is no correspondence to or disclosure of Applicants' second element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Regarding the third element of claim 18 (previously presented), the third element of claim 18 includes the limitation "assigning properties to the unique visualization model nodes including form item, link count, group ID, hidden count, locked, caption, color, hierarchical level, selected and ID". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 9-10) describes a message identifier as being a unique identifier for a post. There is no disclosure in the Smith or Wheeler reference of the claimed assigned properties to the unique visualization model nodes. There is no correspondence to or disclosure of Applicants' third element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations

of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 18 (previously presented), the fourth element of claim 18 includes the limitation "creating unique visualization model edges corresponding to the similarity relationships between the at least one reference document and the at least one target document". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of creating unique visualization model nodes corresponding to the at least one reference document and the at least one target document. There is no correspondence to or disclosure of Applicants' fourth element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 18 (previously presented), the fifth element of claim 18 includes the limitation "assigning properties to the unique visualization model edges including from node, from node ID, to node, to node ID, query list, caption, color, visible, selected and ID". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 9-10) describes a message identifier as

being a unique identifier for a post. There is no disclosure in the Smith or Wheeler reference of the claimed assigned properties to the unique visualization model edges. There is no correspondence to or disclosure of Applicants' fifth element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Regarding the sixth element of claim 18 (previously presented), the sixth element of claim 18 includes the limitation "displaying the unique visualization model nodes and the unique visualization model edges on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of displaying the unique visualization model nodes and the unique visualization model edges on a graphical user interface. There is no correspondence to or disclosure of Applicants' sixth element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Regarding the seventh element of claim 18 (previously presented), the seventh element of claim 18 includes the limitation "indicating a degree of similarity between the displayed unique

visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describe strengths of links between nodes in the visualization may be indicated by relative lengths of the links. There is no disclosure in the Smith or Wheeler reference of indicating a degree of similarity between visualization model nodes by the visualization model edges. There is no correspondence to or disclosure of Applicants' seventh element of claim 18 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 18 is unsupported by the cited references, and should be withdrawn.

Considering independent claim 19 (previously presented), the Office is incorrect in the assertion that the Smith reference discloses a computer-readable medium containing instructions for a visualization model of similarities between documents. There is no disclosure in Smith of a computer-readable medium containing instructions for a visualization model of similarities between documents, or of a generic search function.

Regarding the first element of independent claim 19 (previously presented), the first element includes the limitation "displaying a reference hierarchical object". The Office is incorrect in interpreting the Smith reference as displaying a reference hierarchical object. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters

who post messages to the linked nodes. There is no correspondence to or disclosure of Applicants' first element of claim 19 found in the Smith reference. The first element of independent claim 19 is broadly disclosed in the Wheeler reference incorporated into Applicants' disclosure.

Regarding the second element of claim 19 (previously presented), the second element of includes the limitation "allowing a user to initiate a similarity search, based on at least one attribute of the reference hierarchical object, to find at least one target hierarchical object". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 8, lines 54-57) describes a database filter, which may function as a generally conventional relational database filter. Database filters are distinguishable from similarity search engines, as disclosed in the Wheeler reference, which is incorporated by reference into the present disclosure. A database filter is a program or section of code that is designed to examine each input or output request for certain qualifying criteria and then process or forward it accordingly. It is "pass-through" code that takes input data, makes some specific decision about it and possible transformation of it, and passes it on to another program in a kind of pipeline, without performing any input/output operation on its own. The second element of independent claim 19 broadly describes the similarity search functions disclosed in the Wheeler reference incorporated into Applicants' disclosure. A similarity search according to the Wheeler reference requires a search engine that searches a database to identify degrees of similarity between document attributes that are combined to form a degree of similarity between documents. For example, any number between 0 and 1 may represent a degree of similarity, where 0 represents no similarity and 1 represents exact similarity. There is no correspondence to or disclosure of Applicants' second element of claim 19 found in the Smith reference. The

second element of independent claim 19 is broadly disclosed in the Wheeler reference

incorporated into Applicants' disclosure.

Regarding the third element of claim 19 (previously presented), the third element of

claim 19 includes the limitation "visually representing a unique visualization model reference

node corresponding to the reference hierarchical object and a unique visualization model target

node corresponding to the at least one target hierarchical object that meet a similarity search

criteria". The Office is incorrect in interpreting the Smith reference as disclosing this limitation.

The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a

network graphical visualization according to results obtained by a database filter and user

selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of

links between nodes in the visualization indicted by relative lengths of the links. The links may

be based on a spring-based model representing forces between nodes, or the number of posters

who post messages to the linked nodes. There is no disclosure in the Smith reference of visually

representing a unique visualization model reference node corresponding to the reference

hierarchical object and a unique visualization model target node corresponding to the at least one

target hierarchical object that meet a similarity search criteria. There is no correspondence to or

disclosure of Applicants' third element of claim 19 found in the Smith or Wheeler reference.

Since the cited prior art references fail to teach or suggest all the limitations of the Applicants'

claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 19 is

unsupported by the cited references, and should be withdrawn.

Regarding the fourth element of claim 19 (previously presented), the fourth element of

claim 19 includes the limitation "visually representing a unique visualization model edge

corresponding to a similarity relationship between the reference hierarchical object and each

target hierarchical object". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to the linked nodes. There is no disclosure in the Smith reference of visually representing a unique visualization model edge corresponding to a similarity relationship between the reference hierarchical object and each target hierarchical object. There is no correspondence to or disclosure of Applicants' fourth element of claim 19 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 19 is unsupported by the cited references, and should be withdrawn.

Regarding the fifth element of claim 19 (previously presented), the fifth element of claim 19 includes the limitation "displaying the visual representations of the unique visualization model nodes and the unique visualization model edge on a graphical user interface". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The first Office citation in Smith (col. 8, lines 64-67) describes a rendering engine that renders a network graphical visualization according to results obtained by a database filter and user selections. The second Office citation in Smith (col. 9, lines 24-40) describes the strength of links between nodes in the visualization indicted by relative lengths of the links. The links may be based on a spring-based model representing forces between nodes, or the number of posters who post messages to

the linked nodes. There is no disclosure in the Smith reference of displaying the visual representation of the unique visualization model nodes and the unique visualization model edges on a graphical user interface. There is no correspondence to or disclosure of Applicants' fifth element of claim 19 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 19 is unsupported by the cited references, and should be withdrawn.

Regarding the sixth element of claim 19 (previously presented), the sixth element of claim 19 includes the limitation "indicating a degree of similarity between the displayed unique visualization model nodes by the displayed unique visualization model edges". The Office is incorrect in interpreting the Smith reference as disclosing this limitation. The Office citation in Smith (col. 9, lines 24-27) describes There is no disclosure in the Smith or Wheeler reference of indicating a degree of similarity between visualization model nodes by the visualization model edges. There is no correspondence to or disclosure of Applicants' sixth element of claim 19 found in the Smith or Wheeler reference. Since the cited prior art references fail to teach or suggest all the limitations of the Applicants' claim, this claim is nonobvious under 35 U.S.C. § 103(a). Therefore, the rejection of claim 19 is unsupported by the cited references, and should be withdrawn.
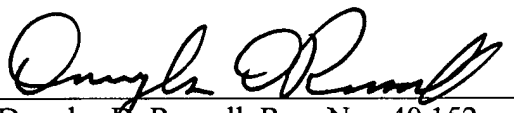
Summary

Applicants have submitted a declaration of common ownership and a terminal disclaimer to disqualify the Wheeler reference under 35 U.S.C. § 103(c). In addition, the responses detailed above rebut the assertions by the Office of obviousness of Applicants' invention, since all the elements of Applicants' claimed invention are not found in the cited references of Smith and

Wheeler. The responses substantiate the nonobviousness of claims 1-25 of Applicants' specification over the cited references. Since the rejections are unsupported for failure to find all Applicants' claim limitations in the cited references, the rejections should be withdrawn.

Applicants have made a diligent effort to distinguish the present invention over the referenced art and to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Douglas D. Russell, Applicants' Attorney at 512-338-4601 so that such issues may be resolved as expeditiously as possible. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited. Reconsideration and further examination is requested.

Respectfully Submitted,

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Date

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